

*"learn the right thing,
from the right people
in the right place,
at the right time!"*



Medical Professional Attributes- **Competence** & **Ways of Maintaining it**

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Objectives

After the session, students should be able to:

- Define competency and competence
- Identify the basic principles of Competency-Based Medical Education (CBME)
- Explain the rationale leading to the development of CanMEDS
- Describe the content of CanMEDS
- Discuss ACGME Competency Domains
- Describe how competence can be a acquired
- Highlight the levels of competence
- Discuss maintaining professional competence

Contents

- Definition
- Competency frameworks
- Ways of maintaining competence in the field of medicine.

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Competency

The habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values, and reflection in daily practice for the benefit of the individual and the community being served.

Epstein RM, Hundert EM. Defining and assessing professional competence. JAMA 2002

Competency

- **An observable ability** of a health professional, integrating multiple components such as knowledge, skills, values and attitudes.

The International CBME Collaborators, 2009

Competent

- **Possessing the required abilities** in all domains in a certain context at a defined stage of medical education or practice

The International CBME Collaborators, 2009

Competence

- Competence entails more than the possession of knowledge, skills and attitudes; it requires you ... **to apply these [abilities]** in the clinical environment to achieve optimal results.

ten Cate, *Med Teach*, 2010

Compet-english

Competency – the thing(s) they need to do

Competent – can do all of the things

Competence – does all of the things
consistently, adapting to contextual and
situational needs

How Does Hamza get to Drive a Car?

- Competency
 - Can accelerate and brake smoothly
 - Can approach an intersection and can turn left
- Competent
 - Passes driver's education classes
 - Passes driver's exam to get the license
- Competence
 - Drives safely on interstate or during bad weather, avoids accidents, no traffic tickets
 - Dad gives him the keys and walks away

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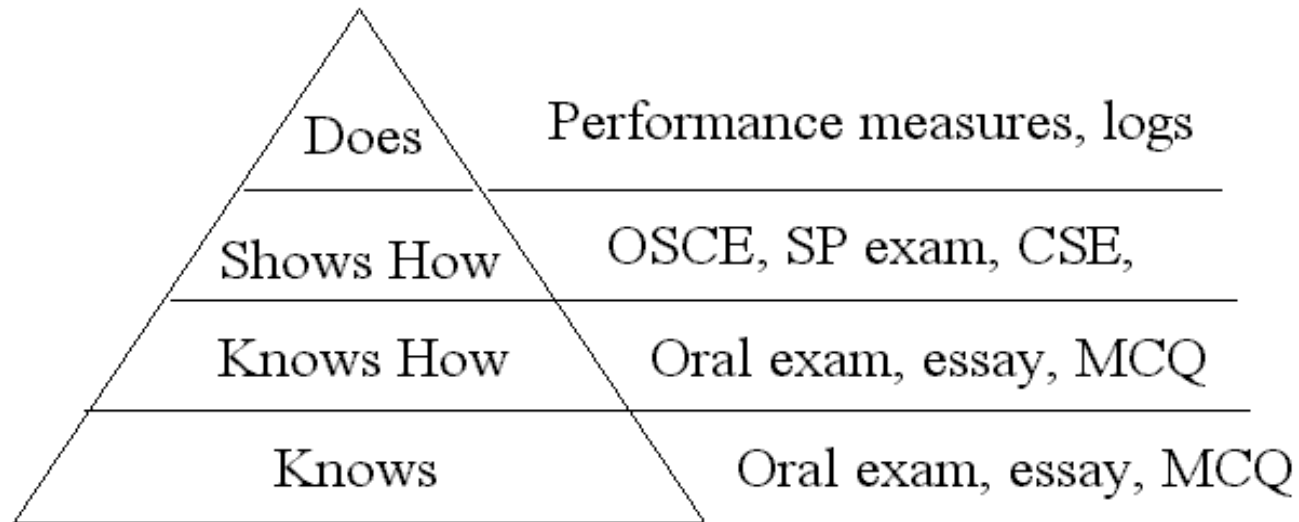
How is this Different from the Traditional Model?

	Traditional time-based	Competency-based
Focus, structure and content	Content: knowledge, skills, attitudes Rotations	Outcomes demonstration of competence Relevant, paced learning opportunities
Goal	Knowledge acquisition	Knowledge application
Actors	Teacher to Learner	Teacher and Learner Relevant role models
Assessment	Evaluation form Norm-referenced Summative	Evaluation portfolio Criterion referenced Formative
Program completion	Fixed time	Variable time

Tannenbaum D, Kerr J, Konkin J, Organek A, Parsons E, Saucier D, Shaw L, Walsh A. *Triple C competency-based curriculum. Report of the Working Group on Postgraduate Curriculum Review-Part 1.* Mississauga ON: College of Family Physicians of Canada; 2011

Assessment Principle # 2

- Match the assessment with the competency



Competency Frameworks

- **CanMEds**
- **ACGME**
- Scottish Doctor
- The Turning Project
- MSOP AAMC

Objectives

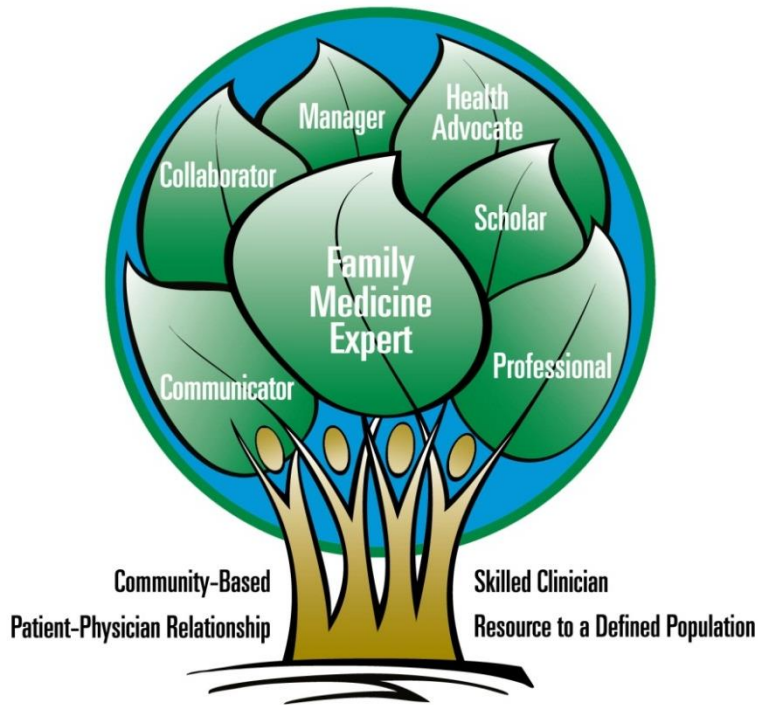
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Background

- The CanMEDS Physician Competency Framework describes the knowledge, skills and abilities that specialist physicians need for better patient outcomes.
- With input from hundreds of Royal College Fellows and staff, family physicians and other medical educators ...
- The framework is based on the seven roles that all physicians need to have, to be better doctors.
- The Royal College Governing Council approved the framework in 1996 and it is the basis for all specialty specific objectives of training recognized by the College.

Introducing ... CanMEDS



- Seven Roles of a physician.
- Four Principles inspire and inform the Roles as “roots”

Adapted from the CanMEDS Physician Competency Diagram with permission of the Royal College of Physicians and Surgeons of Canada. Copyright © 2009.

Medicine Expert

- Major modifications from CanMEDS 2005's "Medical Expert" Role Defines a physician having a long-term relationship of trust with patients and families
- Highlights include
 - The patient-centred clinical method
 - Comprehensive, continuing care
 - Management of complex situations
 - Coordinating care and collaboration



Communicator

- Significant modifications from CanMEDS 2005
- Highlights include:
 - Centrality of the patient–physician relationship
 - Understanding patients’ experience of illness
 - Developing common understanding
 - Effective use of oral and written communication
 - Empowering patients to “take charge” of their own health
 - Communication with different type of patients and challenging situations



Collaborator

- Moderate modifications from CanMEDS 2005
- Highlights include
 - Participating in collaborative team-based models of care and interprofessional health care teams
 - Engaging patients and families as active participants in care
 - The physician as community-based
 - Work with consulting professionals and community agencies
 - Management of scarce resources and understanding of the health care system



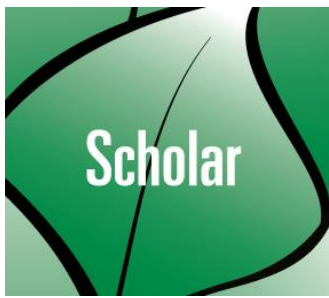
Manager

- Moderate modifications to CanMEDS 2005 Role
- Highlights include
 - Coordinating patient care and physician as a resource to one's patient population
 - Contributing to effectiveness in health care systems
 - Working in different primary care models
 - Practice and career management, and effective use of resources
 - Serving in administrative and leadership roles



Health Advocate

- Minor modifications from CanMEDS 2005
- Highlights include:
 - Respond to patients' needs
 - Respond to community needs
 - Identify determinants of health
 - Identify means of promoting health of patients and communities



Scholar

- Minor modifications from CanMEDS 2005
- Highlights include:
 - Self-directed learning
 - Critical appraisal
 - Educating others
 - Contributing to new knowledge and approaches



Professional

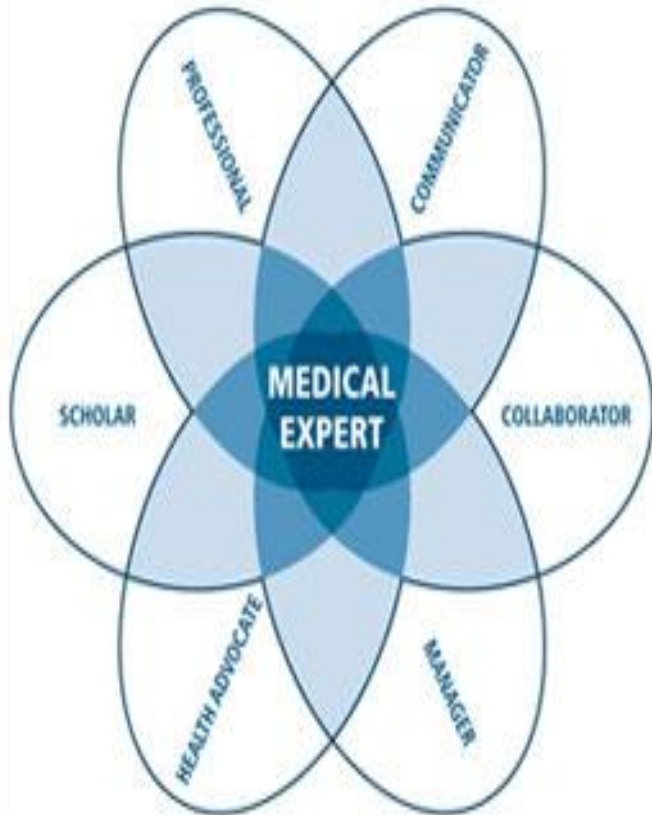
- Moderate modifications from CanMEDS 2005
- Highlights include:
 - Commitment to patient well-being
 - Integrity, commitment and ethical practice
 - Respecting colleagues and team members
 - Demonstrating reflective practice
 - Physician self-care
 - Using evidence-based medicine and critical appraisal
 - Participating in profession-led regulation

CanMEDS

Is Relevant to all Stages of Learning and Practice

- Undergraduate
 - Medical students learn the Roles as outlined in CanMEDS
- Postgraduate
 - Residents are trained in the CanMEDS Roles across the Domains of Clinical Care, through a Triple C Curriculum
- Practice
 - Physicians demonstrate Roles in practice
 - May prove useful to organize CPD objectives

The way forward ...



CanMEDS 2015

The next evolution of the CanMEDS Framework is now underway

Learn more about upcoming consultations and planned updates including:

*Competency milestones,
New content, such as patient safety, and
Faculty development tools.*



ROYAL COLLEGE
OF PHYSICIANS AND SURGEONS OF CANADA

CANMEDS

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ACGME Competency Domains

- Patient care
- Medical knowledge
- Practice-based learning and improvement
- Interpersonal and communication skills
- Professionalism
- Systems-based practice

Medical Knowledge

Residents must demonstrate knowledge about established and evolving biomedical, clinical, and cognate (e.g. epidemiological and social-behavioral) sciences and the application of this knowledge to patient care.

Residents are expected to:

1. **Demonstrate** an investigatory and analytic thinking approach to clinical situations
2. **Know and apply** the basic and clinically supportive sciences which are appropriate to their discipline

Patient Care

Residents must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.

Residents are expected to:

1. **communicate effectively** and **demonstrate** caring and respectful behaviors when interacting with patients and their families
2. **gather** essential and accurate information about their patients
3. **make informed decisions** about diagnostic and therapeutic interventions based on patient information, preferences, up-to-date scientific evidence, and clinical judgment
4. **develop and carry out** patient management plans
5. **counsel and educate** patients and their families
6. **use** information technology to support patient care decisions and patient education
7. **perform competently** all medical and invasive procedures considered essential for the area of practice
8. **provide** health care services aimed at preventing health problems or maintaining health
9. **work with** health care professionals, including those from other disciplines, to provide patient-focused care

Practice Based Learning and Improvement

Residents must be able to investigate and evaluate their patient care practices, appraise and assimilate scientific evidence, and improve their patient care practices.

Residents are expected to:

1. **Analyze** practice experience and **perform** practice-based improvement activities using a systematic methodology
2. **Obtain and use** information about their own population of patients and the larger population from which their patients are drawn
3. **Locate, appraise, and assimilate** evidence from scientific studies related to their patients' health problems
4. **Apply knowledge** of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness
5. **Use** information technology to **manage** information, **access** on-line medical information; and **support** their own education
6. **Facilitate** the learning of students and other health care professionals

Systems Based Practice

Residents must demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value.

Residents are expected to:

1. **Know how** types of medical practice and delivery systems differ from one another, including methods of controlling health care costs and allocating resources
2. **Practice** cost effective health care and resource allocation that do not compromise quality of care
3. **Advocate** for quality patient care and assist patients in dealing with system complexities
4. **Partner** with health care managers and health care providers to assess, coordinate

Professionalism

Residents must demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population.

Residents are expected to:

1. **Demonstrate** respect, compassion and integrity
2. **Demonstrate** a commitment to ethical principles
3. **Demonstrate** sensitivity and responsiveness to patients' culture, age, gender and disabilities

Interpersonal and Communication Skills

Residents must be able to demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients, their patients families, and professional associates.

Residents are expected to:

1. **create and sustain** a therapeutic and ethically sound relationship with patients
2. **use effective listening skills and elicit and provide** information using effective nonverbal, explanatory, questioning, and writing skills
3. **work effectively** with others as a member or leader of a health care team or other professional group

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How is competence acquired:

- It is gained in the healthcare professions through:
 - ▣ pre-service education
 - ▣ in-service training
 - ▣ work experience
- Measuring competence is essential for determining the ability and readiness of health workers to provide quality services.

KSA module

- *Competence is defined in the context of particulars:*
 - *Knowledge*
 - *Skills*
 - *Abilities*
 - *Traits*
- *Competence develops over time and is nurtured by reflection on experience*

Knowledge:

- ❑ Knowledge involves understanding facts and procedures.
- ❑ Obtain knowledge is several way:
 - ❑ pre-service education
 - ❑ in-service training
 - ❑ on-the-job experience
 - ❑ feedback from supervisors
 - ❑ Feedback from peers
 - ❑ Continuing education

Skills:

- ❑ Skills refers to “actions (and reactions) that an individual performs in a competent way in order to achieve a goal”
- ❑ Skill is the capacity to perform specific actions: a person’s skill is a function of both knowledge and the particular strategies used to apply knowledge.

Skills:

- ❑ Skills are gained through:
 - ❑ hands-on training
 - ❑ using anatomic models or real patients
 - ❑ role plays.
- ❑ One may have no skill, some skill, or complete mastery
- ❑ Therefore, in teaching or testing a skill, the level of acceptable mastery must be defined based on the training level.

Abilities:

- ❑ Abilities refers to the power or capacity to do something or act physically, mentally, legally, morally, etc.
- ❑ Abilities are the attributes that a person has inherited or acquired through previous experience and brings to a new task.
- ❑ Abilities are gained or developed over time and, as a result, are more stable than knowledge and skills.
- ❑ Traits influence abilities

Traits:

- ❑ Traits are personality characteristics:
 - ❑ self-control
 - ❑ self-confidence
 - ❑ Personal and social values
- ❑ Predispose a person to behave or respond in a certain way.

Traits:

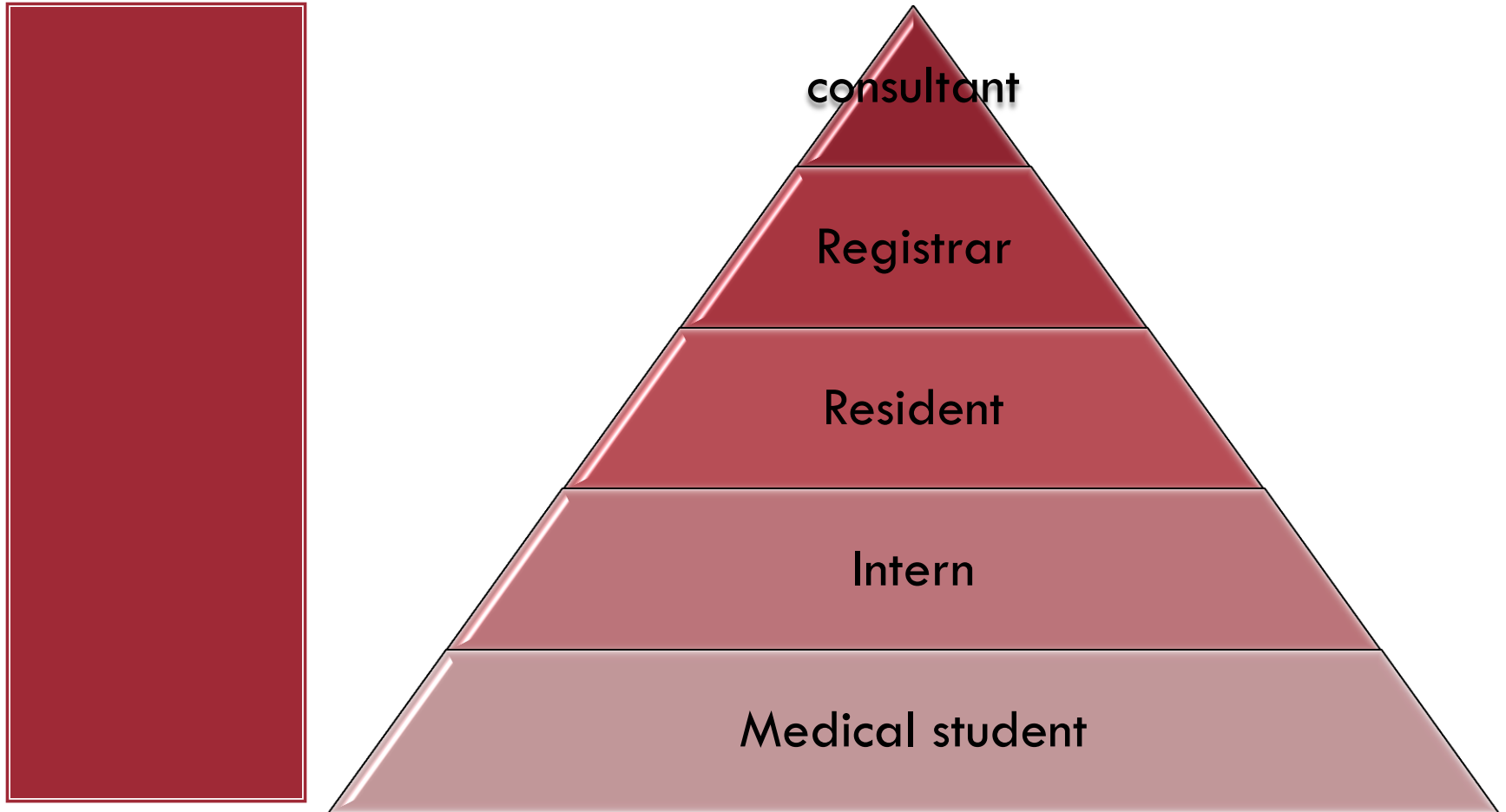
- ❑ Traits influence abilities.
- ❑ For example, self-efficacy is the belief that one can do a task as required; it influences whether a behavior will be initiated and sustained
- ❑ Self-efficacy is determined by the confidence and/or training of a health worker.
- ❑ Low self-efficacy can lead to poor compliance with clinical guidelines and other standards of care.

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Level of competence:



Levels of competence:



Novice:

- ❑ The novice has no background or experience in his or her area.
- ❑ Rules and objective attributes are applied without an understanding or knowledge of the context of the situation.
- ❑ Medical students are novices in medicine
- ❑ One becomes a novice whenever he or she is placed in an unfamiliar area of practice.

Advanced beginner:

- ❑ The advanced beginner demonstrates marginally acceptable performance based on experience acquired under the mentoring of a more experienced physician or a teacher.
- ❑ The larger context of the situation is difficult to grasp at this stage.
- ❑ There is a concern for good management of skills and time, but the need for guidance and assistance remains.

Competent:

- ❑ Competent physicians are able to differentiate between the aspects of the current situation and those of the future and can select those aspects that are important.
- ❑ The focus on good management of time skills remains, but the sense of responsibility is higher.
- ❑ However, they may have an unrealistic concept of what they can actually handle

Proficient:

- ❑ Proficient physicians are able to see the whole situation in context and can apply knowledge to clinical practice, identifying the most salient aspects and differentiating them from those that are less important.
- ❑ Actions are intuitive and skilled.
- ❑ They have confidence in their own knowledge and abilities, focus less on rules and time management.

Expert:

- ❑ The expert physician is able to focus intuitively on solutions to situations without having to explore alternatives.
- ❑ This ability is based on a rich experiential background.
- ❑ Focus is on meeting patient needs and concerns to the point of being an advocate for the patient and care.
- ❑ The focus on self and one's own performance is diminished.

Levels of competence:



Objectives

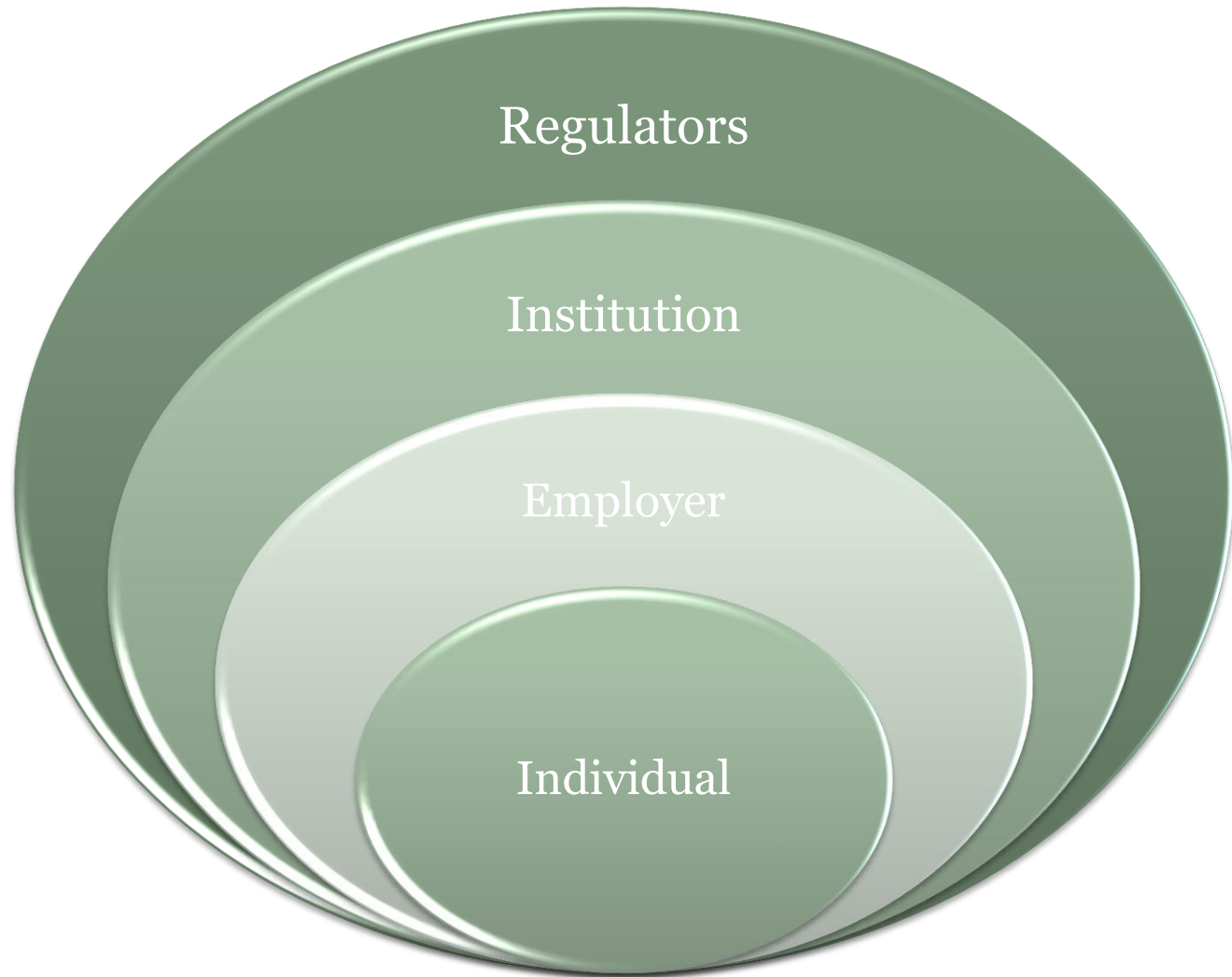
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Requirements:

- Professional competence requires:
 - a firm educational grounding
 - followed by a period of formal training to acquire the relevant knowledge and skills in the workplace
 - continued competence rests on a combination of:
 - Education
 - Continuous development
 - Confidence
 - Experience

Acquiring and maintaining professional competence involves collaboration:



Individual:

- Personally motivated and strive to learn, develop, and continue to do so over a life long period
 - Active learning
 - Learning through mistakes

Individuals: Active learning:

- Individual healthcare professionals, once qualified, need to be sufficiently motivated and have sufficient incentive to maintain and develop their competence.
- If the process of keeping knowledge and skills up to date is neglected, the professional's level of competence will diminish.
- professionals themselves must have an honest understanding of their abilities.

**Individuals:
Learning through
mistakes:**

- It is crucial that errors in practice, or gaps in skill or knowledge, are acknowledged as early as possible
- Must be used as an opportunity for learning, rather than being suppressed or hidden out of fear of blame or sanction.

Employers:

- The employer must provide professionals with sufficient time and opportunity to maintain existing skills, and to acquire and consolidate new skills.

Institution:

- The work environment must support and enable the process of continuous learning
- the working life of healthcare professionals should be so structured as to allow them to meet these requirements

- Regulators:**
- Those who set standards must ensure that:
 - their frameworks of professional standards are and remain appropriate to the needs of patients
 - professionals are, in fact, observed
 - wider systems for ensuring that those standards are adhered to

Recap

Recap

- Defining competence
- CanMeds framework
- ACGME domains
- Maintaining competence

Questions

1. What is competence and how does it become a competency?
2. What is the significance of CanMeds and what is the framework?
3. What are ACGME domains? Enlist and discuss.
4. What are the factors that contribute to maintaining the competence?

For More Information

Tannenbaum D, Kerr J, Konkin J, Organek A, Parsons E, Saucier D, Shaw L, Walsh A. *Triple C Competency-based Curriculum. Report of the Working Group on Postgraduate Curriculum Review-Part 1*. Mississauga ON: College of Family Physicians of Canada; 2011 [Available Here](#)

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Please visit www.cfp.ca for a series of articles on the Triple C Competency-based Curriculum, published in *Canadian Family Physician*

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Thank you